

MR3029-11
Appl. No. 10/057,906
Response to Notice of Non-Compliant Amendment

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AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1 - 25 (canceled).

Claim 26 (currently amended): A method for removing polymer residues on sidewalls of metal lines, comprising:

providing a wafer with at least a metal line layer formed thereon, the sidewalls of the metal lines of the metal line layer having polymer residues formed thereon;

immersing said wafer in a stripping solution for removing the polymer residues in accordance with a first immersion time;

removing said wafer from said stripping solution and maintaining placing said wafer over said stripping solution for a first time so that as to render said stripping solution left on said wafer drips dripping down;

immersing said wafer in a first organic solvent for removing said stripping solution left on said wafer in accordance with a second immersion time;

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removing said wafer from said first organic solvent and ~~maintaining~~
placing said wafer over said stripping solution and said first organic solvent for a
second time at least 50 seconds so that as to render said stripping solution and said
first organic solvent left on said wafer ~~drip~~ dripping down;

immersing said wafer in a water flow for removing the stripping solution
and said first organic solvent left on said wafer in accordance with a third
immersion time; and

removing water left on said wafer in accordance with a predetermined
time.

Claim 27 (original): The method of claim 26, wherein said first immersion time
is about 10 minutes.

Claim 28 (original): The method of claim 26, wherein said first time is about 100
seconds.

Claim 29 (original): The method of claim 26, wherein said second immersion
time is about 5 minutes.

Claim 30 (original): The method of claim 26, wherein said second time is about
50 seconds.

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Claim 31 (original): The method of claim 26, wherein said third immersion time is about 10 minutes.

Claim 32 (currently amended): The method of claim 26, wherein said ~~predetermined~~ time is about 10 minutes.

Claim 33 (original): The method of claim 26, wherein said stripping solution comprises alcohol amine, water, dihydroxylbenzene, hydroxyl amine and anticorrosion agent.

Claim 34 (original): The method of claim 26, wherein said first organic solvent comprises alcohol (ROH).

Claim 35 (currently amended): The method of claim 34, wherein said ~~first~~ alcohol solvent ~~comprises~~ is methanol.

Claim 36 (currently amended): The method of claim 34, wherein said ~~first~~ alcohol solvent ~~comprises~~ is isopropyl alcohol.

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Claim 37 (currently amended): The method of claim 26, wherein prior to immersing said wafer in said water flow, further comprising immersing said wafer in a second organic solvent for further removing said stripping solution left on said wafer in accordance with a fourth immersion time, and removing said wafer from said second organic solvent and ~~maintaining~~ placing said wafer over said stripping solution, said first organic solvent and said second organic solvent for a third time at least 50 seconds so that as to render said stripping solution, said first organic solvent and said second organic solvent ~~drip~~ dripping down.

Claim 38 (original): The method of claim 37, wherein said fourth immersion time is about 5 minutes.

Claim 39 (original): The method of claim 37, wherein said third time is about 50 seconds.

Claim 40 (original): The method of claim 37, wherein said second organic solvent comprises alcohol (ROH).

Claim 41 (original): The method of claim 40, wherein said second organic

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solvent comprises methanol.

Claim 42 (original): The method of claim 40, wherein said second organic solvent comprises isopropyl alcohol.

Claim 43 (original): The method of claim 26, wherein further comprising providing an inert gas flow in said first organic solvent.

Claim 44 (original): The method of claim 43, wherein said inert gas flow comprises nitrogen gas flow.

Claim 45 (original): The method of claim 43, wherein the flow rate of said inert gas flow is about 15 liters/per minute.

Claim 46 (original): The method of claim 44, wherein the flow rate of said nitrogen gas flow comprises 15 liters/per minute.

Claim 47 (original): The method of claim 37, wherein further comprising providing an inert gas flow in said second organic solvent.

Claim 48 (original): The method of claim 47, wherein said inert gas flow

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comprises nitrogen gas flow.

Claim 49 (original): The method of claim 47, wherein the flow rate of said inert gas flow is about 15 liters/per minute.

Claim 50 (original): The method of claim 48, wherein the flow rate of said nitrogen gas flow is about 15 liters/per minute.